



15 East Main Street, P.O. Box 3  
Richmond, Vermont 05477  
www.atc-enviro.com  
802.434.2113  
Fax 802.434.2160

SEP 26 2001

September 26, 2001

George Desch  
Vermont Agency of Natural Resources  
103 So. Main Street – West Building  
Waterbury, VT 05676

RE: SMAC Request  
The Howe Center • Rutland, Vermont  
SMS Site No. 770072  
ATC Projects #63-00201-00005

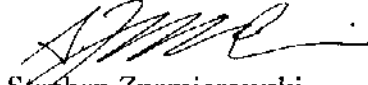
Dear George:

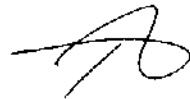
Please find enclosed the Site Management Activity Completed “SMAC” request document prepared by ATC Associates Inc. (ATC) on behalf of Aerojet – General Corporation (Aerojet) for the above referenced site.

We look forward to working with the VTDEC in order to achieve SMAC status for this site. Please contact me if you have any questions regarding the SMAC request document.

Sincerely,

ATC ASSOCIATES INC.

  
Stephen Znamierowski  
Senior Project Manager

  
Thomas J. Broido  
Branch Manager

Enclosure

cc: José N. Uranga, Aerojet  
Craig Fegan, Aerojet

K:\Projects\Job Files Post Feb 1998\A-F 00000 to 24999\00201 Aerojet\00201-00005 CAP & SMAC\00201-00005 SMAC REQUEST\00201-00005 Sept 26 Covr Letter.doc



OCT 01 2001  
15 East Main Street, P.O. Box 3  
Richmond, Vermont 05477  
www.atc-enviro.com  
802.434.2113  
Fax 802.434.2160

---

**Site Management Activity Completed  
Request Document**

**The Howe Center  
Rutland, Vermont  
SMS Site No. 770072**

***Prepared for:***

**Aerojet- General Corporation  
Building 2019 • Department 330  
P.O. Box 13222  
Sacramento, CA 95813-6000**

***Prepared by:***

**ATC Associates Inc.  
15 E. Main St.  
P.O. Box 3  
Richmond, Vermont 05477**

**ATC Project #00201-00016**

**September, 2001**

## **1.0 BACKGROUND**

ATC Associates Inc. (ATC) has prepared this Waste Management Division (WMD), (formerly Hazardous Materials Management Division) Site Management Activity Completed "SMAC" request document on behalf of Aerojet - General Corporation (Aerojet) of Sacramento, CA (formerly PJD Incorporated) to serve as the formal, written documentation to demonstrate that current subsurface conditions at the Howe Center in Rutland, Vermont (the site) have adequately met the conditions set forth in the December 16, 1999 Corrective Action Plan (CAP) prepared by ATC Associates and the conditions noted in the draft WMD Site Management Activity Completed Classification Procedure document dated December 13, 1993. The CAP was conditionally approved by the Vermont Department of Environmental Conservation (VTDEC), WMD on January 17, 2000.

The goal of this Corrective Action Plan was to complete additional groundwater monitoring activities under the regulatory authority of the Vermont Department of Environmental Conservation (VTDEC) to demonstrate that Vermont Groundwater Enforcement Standards (VTGES) are met at established compliance points and to further demonstrate that no unacceptable threat to human health or the environment exists from exposure to hazardous materials originating from the site.

As noted in the CAP, once conditions 1 - 10 of the Draft VT DEC Hazardous Materials Management Division, Site Management Activity Completed (SMAC) Classification Procedure dated December 13, 1993 have been satisfied, the VTDEC will consider issuing SMAC classification for the site, and the EPA delegated VTDEC Resource Conservation Recovery Act (RCRA) program will enter closure codes (once SMAC designation has been granted) for the site into the RCRIS system.

Conditions of the CAP agreement allow for the site to become eligible for SMAC status when groundwater monitoring results for the specified compliance point wells are below VTGES for two consecutive sampling rounds (six months apart) the site. Groundwater sampling results obtained in the spring of 2000 and November of 2000 meet these criteria.

## **2.0 SITE DESCRIPTION**

The former Howe-Richardson Scale Company Facility is located at 1 Scale Avenue (formerly referred to as 26 Strongs Ave.) in Rutland, Vermont and includes approximately 20 acres of land of which approximately one-third is developed with buildings and pavement and currently accommodates various commercial-type businesses and warehouses. See Figure 1, Site Plan. The current owner of the site is Mr. Joseph Giancola.

The former facility manufactured mechanical weighing devices and other material handling equipment for over 100 years. The manufacturing facility has not been in operation since 1982. Hazardous substances used or generated at the site during facility operations included heavy metals, chlorinated solvents, phenols, paint wastes, and fuel oil. The site has been redeveloped

by the current owner and contains a variety of commercial and office uses within the buildings previously occupied by the manufacturing facilities as well as relatively new buildings.

### **3.0 REMEDIAL ACTION ALTERNATIVES**

The Fluor Daniel 1987 report, Evaluation of Environmental Conditions at the Former Howe-Richardson Scale Company, included an evaluation of public health impacts from groundwater and surface water at the site. The Fluor Daniel evaluation concluded that "In summary, even as a result of this conservative analysis, risks to public health resulting from historical activities at the Howe-Richardson Scale Company Site are several orders of magnitude less than what U.S. E.P.A. guidance consider acceptable. In practical terms there is no apparent risk associated with the Howe-Richardson Scale Company Site".

The Fluor Daniel 1987 evaluation also included a feasibility study and review of closure (remedial action) alternatives. This evaluation concluded that continued monitoring at the site was the recommended alternative mainly due to the finding that the site poses virtually no risk to public health. Please refer to the 1987 Fluor Daniel report for details regarding the evaluation of public health impacts and feasibility study.

### **4.0 SITE HISTORY**

The following section is a summary of past environmental assessment site activities, which occurred from 1980 through 2001 and were reported to the VTDEC by Aerojet:

**1980** - Dubois and King, Inc. (a local environmental consulting firm) performed a preliminary environmental assessment of the site. During the assessment, two underground storage tanks containing fuel oil were found to be leaking and subsequently removed. Adjacent contaminated soils were also removed. A total of seven groundwater monitoring wells were installed to monitor for volatile organic compounds (VOCs), phenols, and heavy metals. Six additional monitoring wells were installed to monitor for fuel oil. A recovery well and subsequently a sump-pump-type oil recovery system were installed. As revealed in the assessment, volatile organic compounds including 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA), and 1,1,1-trichloroethane (1,1,1-TCA) were detected in groundwater samples collected from three of the monitoring wells (wells designated MW-4, MW-7 and MW-8). Floating product was observed in the recovery well (Fluor, 1987).

Groundwater samples were collected on a regular basis between 1980 and 1985 from selected monitoring wells.

**September 1985** - Fluor was contracted by Aerojet to conduct an extensive hydrogeologic investigation of the site. As part of the investigation, a soil-gas survey was conducted to evaluate the lateral distribution of VOCs in the vadose zone. Based on the results of the soil-gas survey and other available data, seven soil borings were advanced and subsequently converted into groundwater monitoring wells. Three test pits were excavated in the southern

portion of the site to evaluate subsurface conditions in the onsite landfill area. Water samples were collected and analyzed from selected monitoring wells, the discharge pipe of the recovery system, and from Moon Brook. Soil samples were collected and analyzed from the test pits and from the soil borings associated with the newly installed monitoring wells (Fluor, 1987).

Based on the results of the investigation, a preliminary assessment of the site conditions was made and detailed in a report by Fluor entitled "*Environmental Characterization of the Former Howe-Richardson Scale Company Site*", dated April 1986. In summary, organic compounds characteristic of No. 6 fuel oil including benzene, ethylbenzene and total xylenes were detected in groundwater samples collected from the discharge pipe in the recovery system, and chlorinated solvents were detected in seven monitoring wells. The distribution of chlorinated solvents in the subsurface suggested multiple potential sources. Areas suspected as potential sources included a discharge pipe located in back of the former garage (Building 17), a drain associated with the vapor degreaser which formerly operated in the finishing room (Building 8), and a suspected surface disposal area in the vicinity of well MW-4 (Fluor, 1987).

Landfill material discovered in the test pits included foundry slag, large fragments of brick, wood, pottery, metal and concrete. No concentrations of volatile organic compounds above background levels were detected using an HNU photoionization detector (PID) to evaluate samples in this area (Fluor, 1987).

Concentrations of priority metals detected in soil samples collected from the soil borings and the test pits were reportedly below the California total threshold limit concentrations for priority pollutants (with the exception of one sample collected from one test pit). Chlorinated solvents were detected in four of the seven soil samples at concentrations ranging from 1,100 to 12,000 micrograms per kilogram (ug/kg) 1,1,1-TCA, 1,000 to 4,500 ug/kg 1,1-DCE, and 1,400 ug/kg 1,1-DCA (Fluor, 1987).

Cadmium was detected in groundwater samples collected from five monitoring wells with concentrations ranging from 0.01 to 0.03 milligrams per liter (mg/L) which equals or exceeds the U.S. Environmental Protection Agency (EPA) drinking water standard of 0.01 mg/L for cadmium. Total chromium was detected in groundwater samples collected from three monitoring wells at concentrations ranging from 0.05 to 0.11 mg/L which equal or exceed the EPA drinking water standard of 0.05 mg/L for total chromium. Lead was detected in groundwater samples collected from 14 of 15 wells and from Moon Brook at concentrations ranging from 0.05 to 0.91 mg/L which equals or exceeds the EPA drinking water standard of 0.05 mg/L for lead. Iron was detected in one monitoring well at a concentration of 2.7 mg/L which exceeded the EPA secondary drinking water standard of 0.3 mg/L for iron (Fluor, 1987).

**December 1986** - Under the supervision of Fluor, a monitoring well (designated PZ-1) was installed downgradient of Building 17, and a well (designated PZ-2) was installed near the north end of Building 11 (upgradient well). A Quarterly Monitoring Program (QMP) was

initiated by Fluor to evaluate any changes in chemical concentrations from groundwater and stream samples, ascertain the nature of the lead detected in groundwater samples, monitor groundwater elevations and flow direction, and investigate two suspected VOC sources. Subsequent monitoring events were conducted in March and June 1987. The findings of the monitoring program are summarized in Fluor's September 1987, Site Evaluation Program, Final Report. In general, organic compounds (such as 1,2- and 1,4-chlorobenzene, chloroethane, 1,1-DCA, 1,1-DCE and 1,1,1-TCA) were detected at elevated concentrations from the wells located downgradient of Building 17 (Fluor, 1987).

**Spring 1987** - A Site Evaluation Program (SEP) was initiated by Fluor to determine an overall understanding of the environmental conditions at the site. As a part of the SEP, a gauging station was located in Moon Brook to develop a flow rating curve. Six piezometers were installed to evaluate the vertical component of groundwater flow. Shallow groundwater monitoring wells were installed west of Building 17, near the drain located in Building 8, and west of monitoring well MW-4. Two groundwater monitoring wells were installed for the purpose of obtaining transmissivity estimates of the shallow saturated zone by use of a "slug" test method. Potential changes in contaminate concentrations in the groundwater were examined using computer modeling to simulate transport mechanisms. And finally, a Public Health and Environmental Risk Assessment and a Feasibility and Review of Closure Alternatives were prepared for the site and findings were presented in the September 1987 Fluor Daniel report titled "*Evaluation of Environmental Conditions at the Former Howe-Richardson Scale Company in Rutland, Vermont*".

The findings of the SEP are detailed in Fluor's Site Evaluation Program Final Report dated September 1987. In summary, the approximate bottom depth of the uppermost saturated zone was approximately 33 feet below ground surface as revealed in two soil borings [located approximately midway between current monitoring wells MW-4B and MW-7B (STW-1), and approximately 100 feet southeast of well MW-7B (STW-2)]. The average of two transmissivity tests conducted at these locations was 321.4 ft<sup>2</sup>/day (STW-1) and 1,130.6 ft<sup>2</sup>/day (STW-2). It was concluded in the report that no direct exposure via ingestion exists to the groundwater. However, a potential exposure pathway exists from the groundwater to surface water (Moon Brook and Otter Creek). A worst-case cancer and non cancer risk was calculated to be 10<sup>-6</sup> or less. A potential remedial alternatives report was prepared and the "continued monitoring" alternative was recommended for implementation (Fluor, 1987).

**June 1988** - Monitoring wells MW-4, MW-7, MW-8, PZ-1 and PZ-2 were replaced with new monitoring wells designated MW-4B, MW-7B, MW-8B, PZ-1B and PZ-2B.

**September 1988** - A closure and post-closure report entitled "*Environmental Closure and Post-Closure Plan for the Former Howe-Richardson Scale Company Property located at 26 Strongs Avenue, Rutland, Vermont*", was submitted to the Vermont Agency of Natural Resources, Department of Environmental Conservation (VT DEC) by Aerojet.

**February 1989** - A Hazardous Waste Closure/post-Closure Certification (Certification), effective February 3, 1989 was issued by the VTDEC. The certification authorized PJD,

Incorporated (a corporate affiliate of Aerojet) to close the facility (the Howe Center) in accordance with the conditions and requirements set forth in the Certification. The Certification, which expired in January of 1994, included the following items:

1. Groundwater and surface water monitoring
2. Post closure care up to a twenty year period unless (based on groundwater monitoring results) a petition for shorter time period is granted.

**October 1989** - ATC Associates Inc. (formerly Dennison Environmental) initiates quarterly sampling of groundwater and surface water (Moon Brook) at the site.

**April 1990** - Damaged above-ground vault boxes on monitoring wells MW-4B, PZ-1B and PZ-2B were replaced with flush-mounted vault boxes. ATC/Dennison observed the repair/replacement process and summarized the findings of this process in a letter to Aerojet dated May 22, 1990. It was noted that monitoring well MW-4B was raised approximately 2.0 feet from its original position during replacement activities. The well casing of monitoring well PZ-1B was slightly raised as well. The seal on these two wells may have been damaged due to this activity.

**March 1994**- Monitoring wells MW-30, MW-31-S and MW-32-D were installed.

**November, 1994** - Monitoring wells MW-33-D, MW-34-S, MW-36-D and MW-37-S were installed. Damaged monitoring well MW-8B was replaced with the installation of MW-35.

**December, 1996** - Aerojet and ATC representatives met with VTDEC representatives in order to address the expiration of the Hazardous Waste Closure/post-Closure Certification for the site. Aerojet inquired as to what mechanisms would be available to renew the elapsed certification, in order to assure that Aerojet is operating under current regulatory authorization. Aerojet also requested that the downgradient monitoring wells be used as compliance points and that the Groundwater Protection Rule Enforcement limits be used as concentration limits at all compliance points. The installation of additional downgradient compliance points along Moon Brook was also discussed. Additional issues discussed included a reduction in the frequency of monitoring, a five year monitoring period, and the elimination of metals in groundwater monitoring.

**December 9, 1997** - George Desch, Chief, Sites Management Section issued correspondence summarizing issues of the December 1996 meeting. Mr. Desch acknowledged the importance to update the certification and acknowledged a five-year time frame, additional compliance points, adopting the Enforcement Standards and a reduction in monitoring requirements.

**December 1999** - Corrective Action Plan submitted to Stan Corneille of the WMD. Mr. Corneille issues acceptance letter (with one revision required) of the CAP. July 31, 2000

ATC issues addendum to the CAP (elimination of one compliance well). Mr. Corneille issued September 27, 2000 letter acknowledging the June 22, 2000 Addendum and states that the CAP is acceptable.

## **5.0 QUARTERLY MONITORING ACTIVITIES**

ATC/Dennison initiated quarterly groundwater and surface water monitoring in October 1989 in response to the post-closure plan for the site. To date, a total of 37 sampling rounds have been conducted by ATC. Prior to the CAP, all samples were analyzed for VOCs using EPA Method 624; dissolved chromium using EPA Method 6010 (or equivalent); dissolved lead using EPA Method 7421 (or equivalent); conductivity using EPA Method 120.1; and pH using EPA Method 150.1. Water level and stream flow data were collected at the culvert in Moon Brook (Points C and F). Subsequent to the CAP, groundwater was analyzed via EPA Method 624 for volatile organic chemicals. Following each sampling round, a summary report detailing sampling methodology and laboratory analytical results was prepared and submitted to Aerojet and the VTDEC.

## **6.0 SUMMARY OF WATER QUALITY RESULTS**

### **Moon Brook**

No significant contamination or contamination above Vermont Surface Water standards has been identified from Moon Brook samples collected by ATC. Low levels of petroleum related compounds have occasionally been detected from the Moon Brook samples. Aerojet believes it is probable that these petroleum related contaminants have been introduced upstream of the site.

### **Monitoring Wells**

Extensive groundwater monitoring results are on file with the VTDEC, documenting 35 quarterly rounds and two semi-annual rounds of VOC sampling. Please refer to the individual quarterly reports for monitoring well results.

### **Groundwater Gradient**

Groundwater Gradient Map generated from the quarterly monitoring reports generally indicates groundwater flow direction to be in a south-southeast direction toward Moon Brook.

It should be noted that Aerojet has previously sought access to install monitoring wells in 1994 on the adjacent property (to the west of the site), owned by the State of Vermont and leased to Vermont Railway. The State of Vermont would not allow Aerojet to install monitoring wells at this location. Monitoring data from this area would prove useful to determine subsurface conditions in this area.

## **7.0 CORRECTIVE ACTION PLAN (CAP) REMEDIAL ACTIONS**



1. The following wells were established as compliance points: WC-1-D, WC-1-S, WC-2-D, WC-2-S, MW-42S, MW-41-3, MW-40-D, MW-36-D and MW-39-S.
2. The Groundwater Enforcement Standards, contained in the VDEC's Chapter 12 - Groundwater Protection Rule and Strategy dated November 15, 1997 were designated as concentration limits at all designated compliance points.
3. Continue groundwater monitoring of the groundwater monitoring wells and Moon Brook for volatile organic chemicals on a semi-annual basis for an additional five year period starting in January of 1998 through October of the year 2002. Metal sampling to be discontinued by January 1999.
4. If, at any time during the five year monitoring period, groundwater monitoring results for the compliance point wells are below VTGES for two consecutive sampling rounds (six months apart), the site will become eligible for Site Management Activities Completed (SMAC) designation from the VTDEC WMD. Once the VTDEC WMD issues a SMAC designation, the VTDEC RCRA will enter closure codes for the site into the RCRIS system.
5. If, at the conclusion of the five year monitoring period ending in the fall of the year 2002, (assuming the VTGES levels are exceeded at compliance points and the site has not received SMAC status under item #4 above), the site will be eligible for SMAC classification if the conditions onsite meet the remaining requirements of the VTDEC's Site Management Activity Completed (SMAC) Classification Procedure (December 13, 1993). If the VTGES levels are exceeded at compliance point wells at the conclusion of the five year monitoring points, the site will be eligible for SMAC designation (and RCRA closure) if one or more of the following two conditions is met (assuming all other SMAC conditions have also been met):
  - A. A risk assessment indicates that any exceedances of the VTGES does not cause an unacceptable threat to human health or the environment.
  - B. Groundwater on site is reclassified, or the issuance of a groundwater risk advisory or other legally binding documents or institutional controls related to the SMAC designations are in place to assure no unacceptable threat to human health exists.
6. Subsequent to the site receiving SMAC classification, Aerojet will decommission all monitoring wells on site pursuant to EPA or ASTM standards.

#### **8.0 CONDITIONS FOR SITES MANAGEMENT ACTIVITIES COMPLETED (SMAC) STATUS**

The following information summarizes (with references to pertinent documents) the status of the 10 conditions that must be satisfied in order to achieve SMAC status:

1. **The source(s), nature and extent of the contamination have been adequately defined.**

The February 10, 1999 letter (referenced above) from the WMD states; *"This condition has essentially been met by site investigations conducted in the mid to late 1980's. However, during the present monitoring period, the extent of contamination may be refined"*.

Groundwater results for the two monitoring rounds subsequent to the CAP agreement indicate no exceedances of the VTGES in the compliance wells.

2. **The site has been evaluated to verify that the source(s) of contamination has (have) been removed, remediated, or adequately contained. All remedial action objectives have been achieved, and any remedial actions or activities have been discontinued.**

The February 10, 1999 letter (referenced above) from the WMD states; *"This condition has not been met presently however, remedial action objectives and contaminant containment may be achieved during the next few years of remedial groundwater monitoring"*.

Corrective Action Plan Remedial Actions have been completed (see Section 7.0 of this document). The groundwater monitoring results for the compliance points established in the CAP demonstrate that contaminant containment (via processes such as dilution, adsorption and degradation) has been achieved pursuant to the goals of the CAP (no VTGES exceedances in compliance wells for two sampling rounds).

3. **Levels of contaminants in soil and groundwater shall be stable, falling, or non-detectable as monitored over a reasonable period of time. Any post-remedial phase monitoring shall be completed. In cases where residual contamination remains at the site, measures to reduce or eliminate contaminant migration from these residual sources shall be in place, contact and inhalation risks shall be minimized, and structural (e.g. engineering containment) or institutional controls (e.g. deed and land use restrictions) or both shall be in place.**

The February 10, 1999 letter from the WMD states; *"This condition has not been presently met. When the CAP is approved and implemented, the requirements of this condition may very likely be met within the five year monitoring period."*

As noted above, considerable subsurface monitoring has been conducted at the site. This data has been submitted to the WMD and can again be reviewed to statistically track contaminant levels over time (soil sampling results are included in the Flour Daniel reports previously completed for the site, 1986 & 1987). Post-remedial phase monitoring pursuant to the CAP has been completed. Aerojet requests that institutional controls in the form of a *Notice to Land Records* be implemented in order to prohibit the installation of groundwater wells (for drinking water or other purposes) into the aquifer. Appendix B of this document contains a proposed Notice to Land Records. Soil contamination is addressed item #4 below.

4. **Groundwater enforcement standards shall be met at compliance points established by the HMMD. The compliance boundary shall not extend beyond the site property line, except in extraordinary circumstances. Areally extensive residual groundwater contamination or high residual contaminant concentrations in groundwater shall require reclassification of groundwater, or the issuance of a groundwater risk advisory, or both.**

**Soil contaminant guideline levels shall also be met. Engineering or institutional controls or both are required if residual soil contamination above guideline levels is present at the site. Applicable air and surface water quality standards must also be met.**

*The February 10, 1999 letter from the WMD states; "Groundwater enforcement standards will be met at compliance points that the State will establish. The need to reclassify groundwater will be made at the time Aerojet requests a SMAC designation. Soil sampling will not be required and therefore soil contaminant guideline levels will not have to be met. Contaminated soil has been removed from the site during remedial activities in the early to mid-1980's. There are no applicable air quality standards that will have to be met on this site. Water quality standards are presently being met. There is no reason to believe that they will not continue to be met in the future.*

As noted above, Groundwater monitoring results for the specified compliance point wells are below VTGES for two most recent consecutive sampling rounds (six months apart) the site. Aerojet proposes land use restrictions for the property to prohibit the installation of groundwater wells on site. Therefore Aerojet does not believe there is justification for the reclassification of groundwater or the issuance of a groundwater risk advisory. Reclassification of groundwater and groundwater risk advisory are unnecessary due to the fact that there is low potential future use of the groundwater as a public water supply. The proposed Notice to Land Records (see item #3 above) should effectively prohibit the installation of groundwater wells on site.

5. **No unacceptable threat to human health or the environment exists at the site from exposure to hazardous materials.**

*The February 10, 1999 letter from the WMD states, "A risk assessment was conducted in the mid 1980's and a report submitted to the state. No unacceptable risks to human health or the environment were identified. Short of a significant release or mobilization of hazardous constituents in the future, this condition has already been met."*

The risk assessment noted above is contained in the Evaluation of Environmental Conditions at the Former Howe-Richardson Scale Company in Rutland, Vermont Site Evaluation Program Final Report, dated September 1987. No significant release or mobilization of hazardous contaminants has been identified through the groundwater monitoring conducted by ATC since the approval of the CAP.

**6. Sites subject to regulation under the Resource Conservation and Recovery Act (RCRA) or the Vermont Hazardous Waste Management Regulations will have met the requirements of 40 CFR 264.**

The February 10, 1999 letter from the WMD states, *"If the site meets all the SMAC requirements and is [so classified] in the year 2002 this condition will automatically be met. The SMAC letter will indicate such."*

As noted in the above DEC comments the requirements of 40 CFR 264 will be met upon meeting the SMAC requirements.

**7. Sites subject to regulation under the Comprehensive Environmental Response Compensation, and Liability Act (CERCLA) will have met the requirements of 40 CFR 300.**

The February 10, 1999 letter from the WMD states, *"This condition has already been met. A No Further Federal Remedial Action Planned (NFRAP) designation for the site was issued by the Environmental Protection Agency (EPA) last year."* (1998).

**8. SMAC decisions shall be adequately documented. Adequate documentation shall include the following:**

- a. **The responsible party's written request for a SMAC designation. If there are no identified responsible parties, the current site owner may request a SMAC designation. The State may also initiate a SMAC designation.**
- b. **A final report or letter, as approved by the State, which must include or refer to information contained in the state's site file which was developed during the investigation and redemption phases and which will support a decision to close the site. This shall at a minimum include:**
  - i. **Background information about the site, including but not limited to site name and location; site owner(s); potentially responsible party(ies); description of hazard at site;**
  - ii. **A description of the remedial action and evaluation of the remedial action effectiveness (in comparison to remedial goals), and estimate of residual contamination, and the destination of any waste products generated by the remedial action (soils, product); and**
  - iii. **Monitoring results, collected during investigation, remedial action, and monitoring at the site, of affected or threatened environmental media.**

- c. If appropriate or required, Ground Water Risk Advisories (GWRAs) or Reclassifications, an Assurance of Discontinuance (AOD), or other legally binding documents related to the SMAC designation, and documentation of any institutional controls (e.g. deed restrictions, local land use planning incorporation; financial assurances).
- d. The State's SMAC letter and if applicable a Record of Decision (ROD), including all SMAC conditions.

The February 10, 1999 letter from the WMD states, *"This condition and the associated requirements will be addressed during the corrective action process by Aerojet and the state. Aerojet will be responsible for requirements 8.a. and b.; the State for requirements 8. c. and d."*

This document serves as Aerojet's written request for a SMAC designation (item 8. a.); this document also serves to provide or reference information noted in item 8. b. above.

- 9. All SMAC designations shall be noticed to the town clerk's office. All sites that exceed 10 V.S.A. Section 6608 (d) notification thresholds must be closed by a Section 6608(d) notification. For sites where a Section 6608(d) notification was not required, SMAC notification to the town clerk's office shall follow a similar procedure. At a minimum, a fifteen day period will be allocated for public comment before the closure becomes final.

Although it does not appear that the site exceeds 10 V.S.A. Section 6608 (d) notification thresholds, Aerojet proposes to follow a similar notification procedure with a proposed thirty day period for public comment before the closure becomes final.

- 10. The ANR reserves the right to require additional investigations or remedial activities at a SMAC designated site which:
  - a. supplemental previous remedial activities that were found to be inadequate in extent, depth, or effectiveness; or
  - b. are required based on new information on the times, extent, amounts, types, and nature of materials released; or
  - c. are required based on new information on the spread of contaminants, health effects, or site conditions; or
  - d. are required due to new or revised regulations; or
  - e. arise from errors or omissions; or
  - f. are required as a result of additional releases.

## 9.0 REFERENCES

Fluor Daniel April 1987, "*Environmental Characterization of The Former Howe-Richardson Scale Company site, 26 Strongs Ave., Rutland, Vermont*".

Fluor Daniel September 1987, "*Evaluation of the Environmental Conditions at the Former Howe-Richardson scale Company in Rutland, Vermont*".

Fluor Daniel September 1988, "*Environmental Closure and Post-Closure Plan Avenue, Rutland, Vermont*".

Vermont Department of Environmental Protection September 1988, "*Chapter 12, Groundwater Protection Rule and Strategy*".

Draft VT DEC "*Hazardous materials Management Division, Site Management Activity Completed (SMAC) Classification Procedure dated December 13, 1993* \_"

ATC Associates October, 1998 report "Quarterly Monitoring Activities Conducted at the Howe Center in Rutland, Vermont"

February 10, 1999 letter from Stanley Cornille, Vermont Department of Environmental Conservation, regarding the former Howe Richardson Scale Site #770072.

## **APPENDIX A**

### **Notice to Land Records - DRAFT**

## **DRAFT**

### **NOTICE TO CITY OF RUTLAND, VERMONT LAND RECORDS**

**Site Name:** Former Howe-Richardson Scale Company Facility (currently known as "The Howe Center") located at 1 Scale Avenue in Rutland, Vermont.

**VDEC Site No.:** 770072

**Address of Site:** 1 Scale Avenue in Rutland, Vermont

**Lot No.:**

#### **Background**

The former Howe-Richardson Scale Facility is located at 1 Scale Avenue in Rutland, Vermont and includes approximately 20 acres of land of which approximately one-third is developed with buildings and pavement and currently accommodates various commercial-type businesses and warehouses.

The former facility manufactured mechanical weighing devices and other material handling equipment for over 100 years. The Howe-Richardson Scale Facility has not been in operation since 1982. Hazardous substances used or generated at the site during facility operations include heavy metals, chlorinated solvents, phenols, paint wastes, and fuel oil. Groundwater monitoring for volatile organic chemicals (VOCs) was initiated in 1980 and has been on-going through the year 2000.

#### **Potential Sensitive Receptors & Remedial Action Alternatives**

A 1987 Evaluation of Environmental Conditions at the Former Howe-Richardson Scale Company facility included an evaluation of public health impacts from groundwater and surface water at the site. The evaluation concluded that risks to public health resulting from historical activities at the Howe-Richardson Scale Company Site are several orders of magnitude less than what U.S. E.P.A. guidance consider acceptable. This evaluation concluded that continued monitoring at the site was the recommended alternative mainly due to the conclusion that the site poses virtually no risk to public health. **The Waste Management Division (WMD) of the Department of Environmental Conservation prohibits any drilling into groundwater or extraction of groundwater at this facility.**



### **Summary of Water Quality Results**

Extensive groundwater monitoring results for the facility are on file with the DEC, documenting 35 quarterly rounds of VOC sampling. During the latest sampling round of November, 2000, the following wells contained levels of VOC (chlorinated solvents) contaminants at or above groundwater enforcement standards: MW-35, MW-30, MW-31-D, MW-32-S, MW-33-D and MW-36-D.

Groundwater monitoring results for downgradient compliance monitoring wells (along the southern property boundary of the facility) have historically been below groundwater enforcement standards.

Additional information regarding this contamination is available at the Waste Management Division (WMD) of the Department of Environmental Conservation, Agency of Natural Resources, 103 South Main Street/West Building, Waterbury, Vermont 05671-0404 (Phone 802-241-3888). This land record may only be removed/updated by the WMD. The WMD must be contacted prior to conducting any subsurface work or excavation at the site.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2001

Aerojet – General Corporation by:

\_\_\_\_\_  
Authorized representative